

Opinions and Lifestyle Survey: Methodological Investigation into Response Scales in Personal Well-being

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Office for National Statistics

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Introduction

Personal Well-being questions have been asked on Office for National Statistics (ONS) surveys since April 2011. ONS has 4 headline questions to measure personal well-being that were decided upon after consultation, research and testing. These are:

“Overall, how satisfied are you with your life nowadays?”

“Overall, to what extent do you feel the things you do in your life are worthwhile?”

“Overall, how happy did you feel yesterday?”

“Overall, how anxious did you feel yesterday?”

These questions are measured on an 11-point scale, where 0 is ‘not at all’ and 10 is ‘completely’. In other non-ONS household surveys, for example, [the UK Household Longitudinal Survey \(hereon referred to as “Understanding Society”\)](#) and the [“Which? Consumer Insight” Survey](#) different response scales are used for questions about life satisfaction.

This report examines the findings from the Opinions and Lifestyle survey where questions about life satisfaction were asked using 3 response scales. Measuring the same questions using different scales can give us an indication of the extent to which we can compare ONS’ Personal Well-being questions to similar questions on different scales.

Background and Approach

The scale used for the ONS personal well-being questions was chosen because 11-point scales of this nature are more commonly used across other surveys of interest ([ONS 2011a](#)). This scale was applied to all 4 questions to ensure that the scales between the questions are consistent, in order to help respondents answer the questions more easily and to aid analysis across separate questions.

Life Satisfaction questions on the [Understanding Society](#) survey use a 7-point scale, whereas a 5-point scale is used on the [“Which? Consumer Insight” Survey](#). Different lengths and labelling of scale points require careful consideration, as a different scale may affect how people respond to the question. In addition, the use of different scales in different surveys means that it can be difficult to compare responses across different sources of data.

The 3 questions and response scales investigated in this report are:

- [11-point scale](#)

Overall how satisfied are you with your life nowadays where 0 is ‘not at all satisfied’ and 10 is ‘completely satisfied’.

This question is asked by ONS on the [‘Annual Population Survey’](#).

- 7-point scale

Please choose the number which you feel best describes how dissatisfied or satisfied you are with the following aspects of your current situation...your life overall.

1. Completely dissatisfied
2. Mostly dissatisfied
3. Somewhat dissatisfied
4. Neither satisfied or dissatisfied
5. Somewhat satisfied
6. Mostly satisfied
7. Completely satisfied

This question is used on the [‘Understanding Society’ Survey](#).

- 5-point scale

Taking everything into consideration how satisfied or dissatisfied are you with your life overall at the moment?

1. Very satisfied
2. Fairly satisfied
3. Neither satisfied or dissatisfied
4. Fairly dissatisfied
5. Very dissatisfied

This question is used on the [‘Which? Consumer Insight’ Survey](#).

For the purpose of this release the questions above will be referred to as “11-point scale”, “7-point scale” and “5-point scale”.

The data analysed in this paper are from the Opinions and Lifestyle Survey (OPN). For more information on the OPN survey, please see methods notes 1 and 2. The question scales here were tested as a split trial, so each individual in the monthly sample was asked either the 11-point scale, the 7-point scale or the 5-point scale question.

Results

Descriptive Statistics

Each question assesses an individual's perception of their own life satisfaction on a different scale. Table 1 shows the mean, median and mode for the different scales. For all 3 scales, the median score is equal to the mode and the mean value is just below that of the median and mode. It is not easy to make comparisons across the 3 scales using these measures due to the scales being of different lengths, but this analysis is still beneficial to give us insight into the responses of each question and gives an understanding of the shape of the data along each scale. It also helps in providing context for the further analysis seen in this report.

Table 1: Average responses for each question

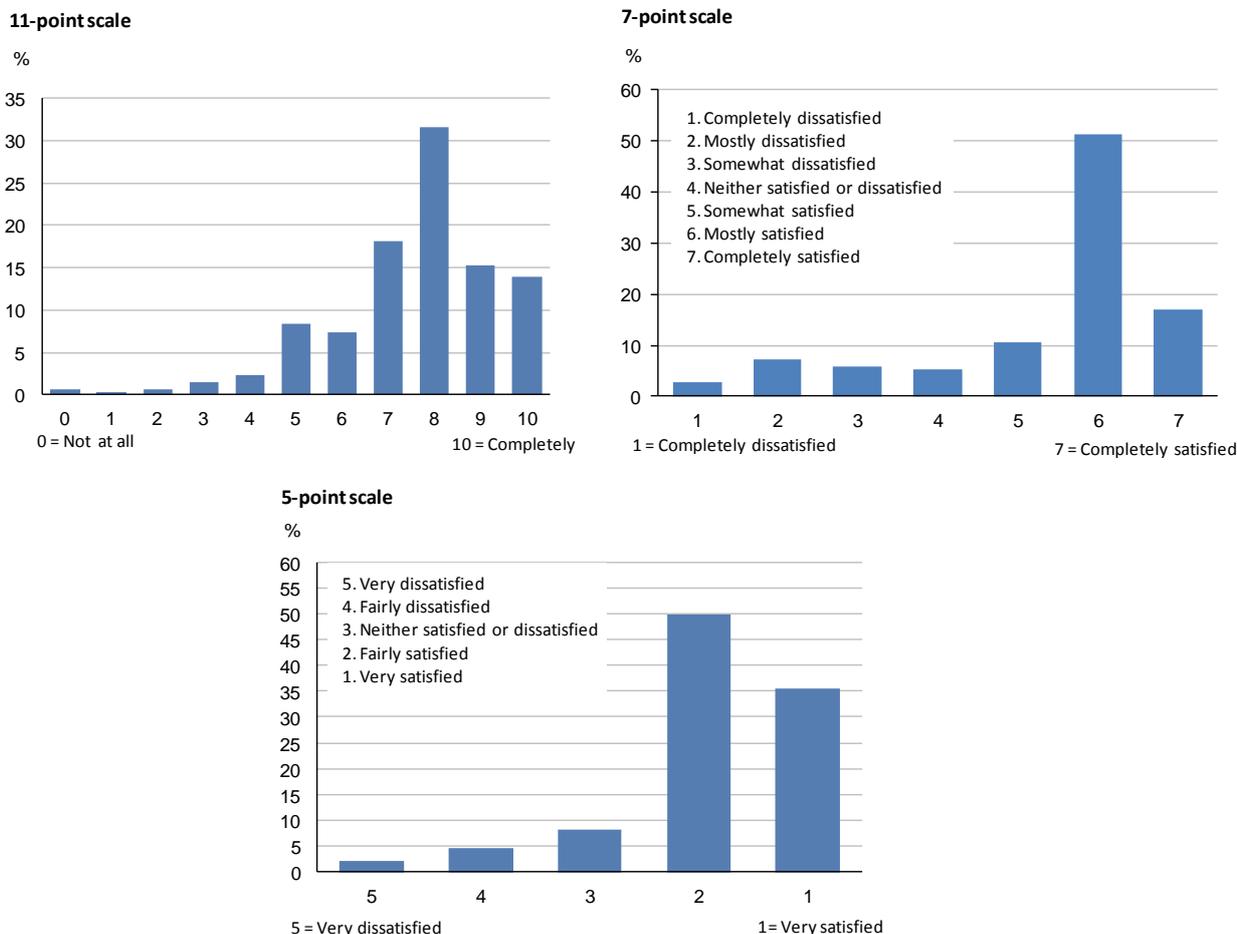
| Great Britain, adults aged 16 and over | | | |
|---|----------------|---------------|---------------|
| | 11-point scale | 7-point scale | 5-point scale |
| Mean | 7.6 | 5.4 | 1.9 |
| Median | 8 | 6 | 2 |
| Mode | 8 | 6 | 2 |

Source: Opinions and Lifestyle Survey, Office for National Statistics

Distribution of responses

The average estimates above summarise the overall responses for each question, but do not show how the data is distributed along each scale. It is beneficial for us to look at how the data is distributed along the scale, as it could indicate whether the responses are similarly distributed, and it helps to show whether the length of the scale has an impact on the interpretation of the question. Figure 1 shows histograms of the proportion of responses in each of the response categories for each of the 3 scales.

Figure 1: Histograms displaying the distribution of responses across the 11-point, 7-point and 5-point scale^{1,2}



Source: Opinions and Lifestyle Survey, Office for National Statistics

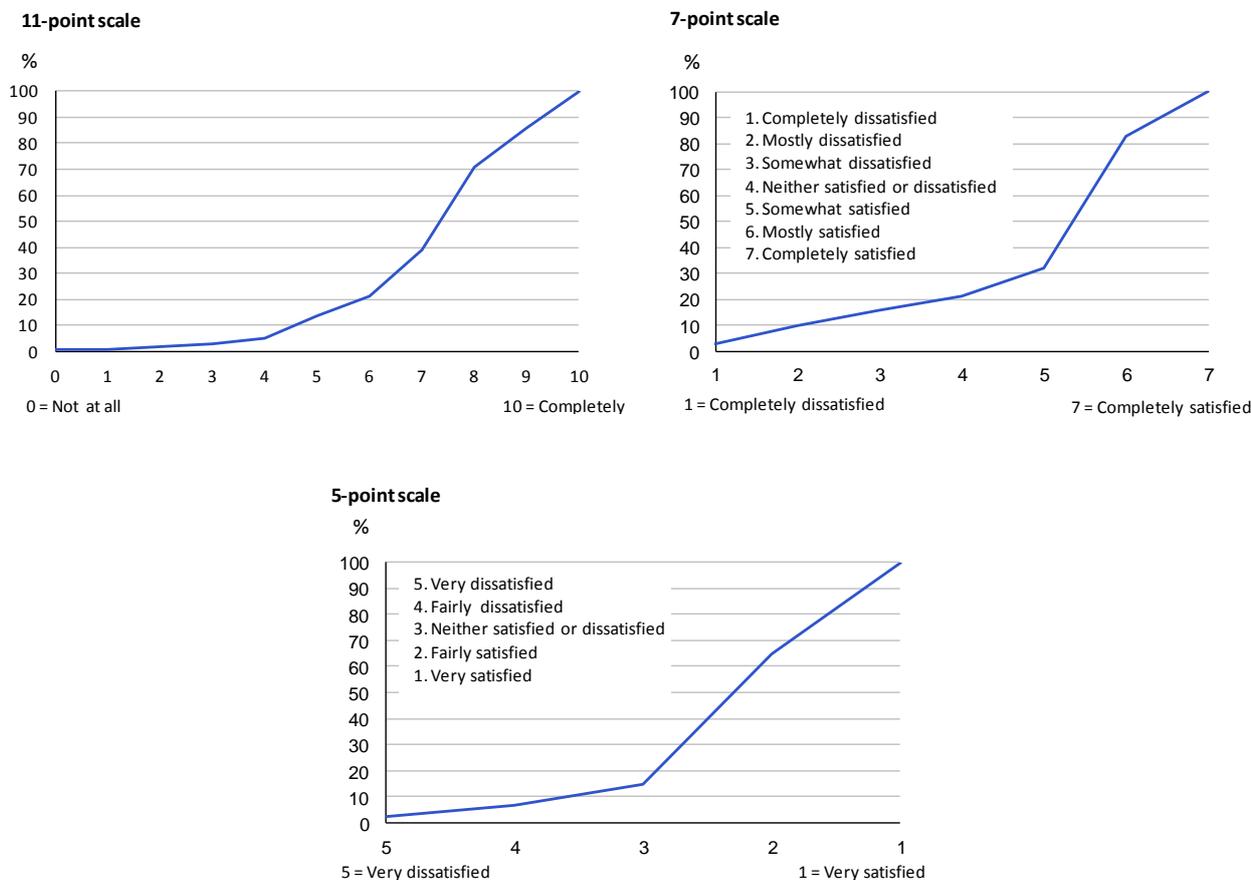
Notes:

1. The 5-point scale has been reversed to ease comparisons.
2. Due to the nature of the survey, some samples are small and therefore may be less reliable.

Figure 1 shows a larger proportion of people answered the questions on the positive side (i.e. to the right of the median) of the well-being scale.

The distributions of the data are quite varied across the 3 scales. For example, the proportion of people answering 0,1 or 2 (the negative end of the well-being scale) on the 11-point scale is extremely small and the scale shows a gentle curve building up to the modal response value of 8. The 7 point scale shows a clear and distinct spike at the modal value of 6 (the positive end of the well-being scale) and the 5-point scale shows a peak at both scale points 1 and 2 (the positive end of the well-being scale).

Figure 2: Cumulative frequency of responses across the 11-point, 7-point and 5-point scale^{1,2}



Source: Opinions and Lifestyle Survey, Office for National Statistics

Notes:

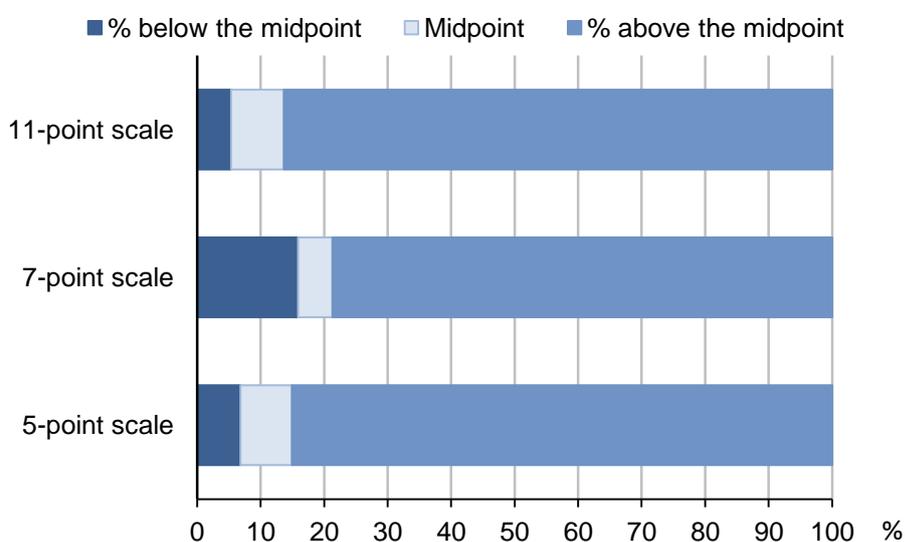
1. The 5-point scale has been reversed to ease comparisons.
2. Due to the nature of the survey, some samples are small and therefore may be less reliable.

The cumulative frequency charts above are an alternative way to display the distribution of the data. The distributions are different but hard to compare to one another as they are on different scales. Again, we can clearly see from Figure 2 that the proportion of people who answered 0, 1, 2 and 3 (low levels of life satisfaction) on the 11 point scale is very small. The 5-point scale shows a sharp increase in the number of people answering 2 and 1 (high levels of life satisfaction) compared to the number of people answering 3 or below. The cumulative frequency of the 7-point scale looks slightly different to the other 2, with a steady upwards trend in the proportion of people answering 1 – 5 and then a very sharp increase between the number of people answering 5 and the number of people answering 6. This echoes the findings discussed when looking at the histograms earlier in this report.

Proportions above, below and on the midpoint

An alternative way to investigate distributions of responses is by assessing the proportion of responses above or below defined thresholds. Thresholds are useful to present the proportion of people who fall above and below a certain point on the scale ([ONS 2011a](#)). This allows comparison of proportions of people who reported high well-being against people who reported lower well-being across the 3 different scales. The scales have therefore been split to show the proportion of people who answered the midpoint of the scale, gave a response which was above the midpoint, or gave a response which was below the midpoint.

Figure 3: Proportions answering above, below and on the midpoint for each of the 3 scale questions



Source: Opinions and Lifestyle Survey, Office for National Statistics

- For the 11-point scale the midpoint of the scale is response category 5, the proportion above the midpoint are the people who answered response categories 0-4 and the proportion below the midpoint are the people who answered 6-10.
- For the 7-point scale the midpoint of the scale is 4, the proportion of people above the midpoint are the people who answered 1-3 and the proportion below the midpoint are the people who answered 5-7.
- For the 5-point scale the midpoint of the scale is 3, the proportion who answered below the midpoint is 4-5 and the proportion of people who answered below the midpoint is those people who answered 1-2. Please note that the 5-point scale is different because the scale has been flipped for ease of analysis.

The 5-point scale and the 11-point scale show fairly similar results, and again, these are quite dissimilar to the results that are displayed by the 7-point scale. A larger proportion of people who answered the 7-point life satisfaction scale gave a score which was below the midpoint than the proportion for those people who answered the 5-point and the 11-point scale. These results appear to indicate that the results given on the 5-point scale are more comparable with the 11-point scale than the 7-point scale. This pattern can also be seen

from the distribution charts displayed earlier. However, there are some differences between the distribution of responses given on the 5-point and the 11-point scale; these are not identical by any means. A larger proportion of people who answered the 5-point scale answered below the midpoint than the proportion of those answering the 11-point scale. This information informs us of the similarities but also the differences between the scales, which give an indication that perhaps the scales are measuring life satisfaction in different ways. This could be indicating that people understand the 5-point scale and the 11-point scale in a similar way. Possible reasons for this are discussed in the conclusion.

Normality

Data can be normally distributed, positively skewed or negatively skewed. If the majority of the data is clustered around the right hand side of the scale (usually the higher scores), then the data is negatively skewed. Likewise, data that is mostly clustered around the left hand side of the scale (usually the lower scores) is positively skewed. Skewness is the extent to which data is not symmetrical around the mean.

Table 2: Test of Normality using the Shapiro-Wilk test

| Great Britain, Adults aged 16 and over | | | | |
|---|------------------------|----------|----------|--|
| | Shapiro-Wilk Statistic | Skewness | Kurtosis | |
| 11-point scale | 0.895* | -1.156 | 2.000 | |
| 7-point scale | 0.800* | -1.199 | 0.420 | |
| 5-point scale | 0.781* | 1.298 | 1.811 | |

Source: Opinions and Lifestyle Survey, Office for National Statistics

Notes:

* Significant at the 99% level.

A Shapiro-Wilk test was conducted on the data, which measures the extent to which data are normal, or alternatively, the extent to which the data deviates from the normal distribution. The significant Shapiro-Wilk test statistics show that all 3 questions failed the normality assumption. Both the 11-point and the 7-point scale were negatively skewed, and the 5-point scale was positively skewed. This was expected as the numerical scoring scale for this question runs in the opposite direction to the other 2 questions, where a higher number indicates a more negative response. Skewness increased slightly with more scale points, with the 5-point scale showing the smallest skew of the 3 and the 11-point scale showing the largest skew of the 3. This is as expected because longer scales are naturally more likely to result in a greater spread of the data, which would result in a larger variance.

This pattern did not hold for Kurtosis however. Kurtosis refers to the shape of the data around the mean and the tails of the distribution. A normal distribution has a kurtosis of zero, whereas data that exhibit positive kurtosis are more peaked about the mean and have shorter tails (Dawes, 2008). It was found in this analysis that the 11-point scale had the highest kurtosis of the 3 scales, but the 7-point scale had the lowest kurtosis. This suggests that people were most likely to use all 7 of the points on the 7-point scale than they were to use all 11 of the points for the 11-point scale. For example, very few people answered “0”, “1” or “2” on the 11-point scale. We would expect to see a pattern here, with

the 5-point scale showing the smallest kurtosis and the 11-point scale showing the largest kurtosis of the 3, but this pattern does not hold. Again, this seems to be implying that people answered the 7-point scale in a different way to the way in which they answered the 11-point scale and the 5-point scale. It also highlights the fact that it is not easy to make comparisons across the 3 scales by examining them as they are. Therefore in the next section of this paper, an alternative way to examine these scales using a rescaling method has been investigated.

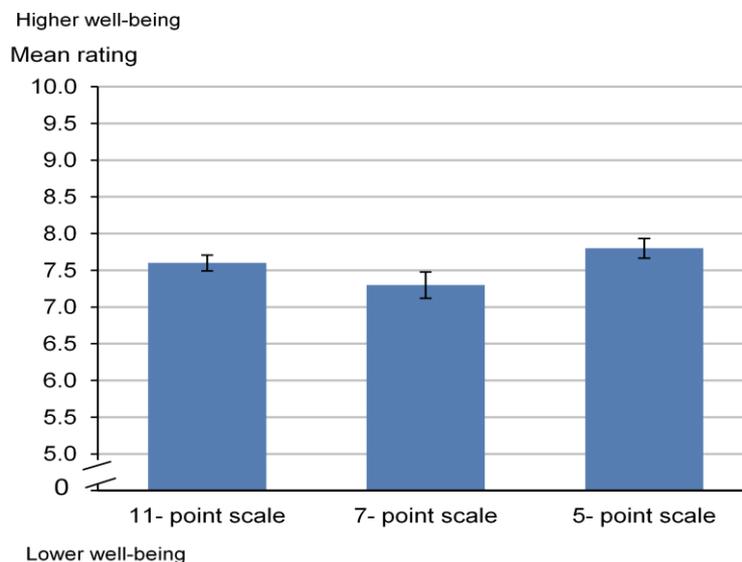
Rescaling

In order to examine the differences between the scales in more detail it is useful to rescale the data so that the 3 scale formats are comparable to one another. For these calculations, ratings from the 7-point scale and the 5-point scale were rescaled* to make them comparable with the 11-point scale. The following formula was used, which is based on a formula by Preston and Colman (2000):

$$(\text{Rating} - 1) / (\text{Number of response categories} - 1) \times 10.$$

For more detail about this rescaling procedure, please see methods note 6. For the purpose of the analysis in this release we are assuming linearity across each scale. Rescaling is the best way in which we can compare the scales against one another, however, it should be noted that it still may not lead to completely comparable results because the assumption of linearity may not hold. For more detail on this, please see methods note 7.

Figure 4: Average¹ scores of rescaled variables on the 0-10 scale



Source: Opinions and Lifestyle Survey, Office for National Statistics

Notes:

1. Average score is based on the mean.

* The purpose of this rescaling is to facilitate comparison between the scale formats, not to find a specific functional transformation that will minimize any rescaled differences.

Figure 4 shows the average scores for each of the rescaled variables. The differences between all 3 scales are statistically different from one another at the 5% level. The highest mean was seen for the 11-point scale, and the lowest mean was seen for the 7-point scale. Once again here, we can see a big difference between the results on the 7-point scale compared to the other 2 scales, although all 3 are statistically different from one another based on an f-test. For more detail about significance testing see methods note 5.

Past research on well-being has shown that scores often tend to be negatively skewed ([ONS 2013](#), [ONS 2014](#)). This means that there are more responses at the positive end of the well-being scale than there are at the negative end of the well-being scale. This is consistent with the results that have been found in this paper, and can clearly be seen from the histograms displayed above. More scale points mean that there are more positive responses to choose from, so the fact that respondents tend to give responses that are positive may mean that a finer scale with more response options could result in a slightly lower mean score. This is consistent with the results found for the 11-point and 5-point scale, but again the 7-point scale is showing a different pattern.

Conclusions

Great care should be taken when comparing results across scales. The results from this analysis show that responses are not equal when asked across different scales, suggesting that individuals are likely to answer differently depending on the scale that they are presented with (Dawes, 2008).

One reason for this may be translation ease. According to Krosnick and Presser (2010), the scale length can impact on the ease at which people are able to map their attitudes onto the response alternatives. For example, if an individual has an extremely positive or negative attitude, a dichotomous scale such as “like” or “dislike” easily allows the individual to report their attitude, however, if an individual has a more neutral attitude, this scale would not easily permit them to express how they feel. Therefore, the value of adding more points to a rating scale may depend on the extent to which people’s mental representations of the construct are refined.

It is also worth noting that the 3 response scales investigated in this release may not be comparable to one another due to the fact that the questions were worded differently. Even small changes in question wording can sometimes lead to a change in the way that people respond or express particular attitudes (Iarossi, 2006). Further research would be needed to investigate the extent to which this would affect the results, testing differing response scales using the same question wording for each.

Other studies suggest that reliability between response scales is higher when all points are labelled with words than when only some are (Krosnick and Bernier, 1993). In this analysis, the 11-point scale did not have all points labelled with words, whereas the 7-point and 5-point scale did. This could be a factor that led to the significant differences which were found. Krosnick and Fabrigar (1997) found that labels on every data point were more cognitively demanding than end-labelled scales because they require the respondent to remember a lot of information. Questions without labels are therefore much less of a burden to answer. This may explain why our 7-point scale showed such different results to the other 2 scales, as it was the most burdensome for individuals to answer, especially

due to the interviewer led mode of question asking that is used on the OPN survey.

References

Dawes, J. (2008) Do data characteristics change according to the number of scale points used? An experiment using 5-point, 7-point and 10 point scales. *International Journal of Market Research*, Vol. 50, Issue 1.

Iarossi, G. (2006) *The Power of Survey design*. The World Bank, Washington D.C.

Krosnick, J.A., & Berent, M.K. (1993) Comparisons of party identification and policy preferences: The impact of survey question format. *American Journal of Political Science*, 37, 941-964.

Krosnick, J.A., & Fabrigar, L.R. (1997). Designing Rating Scales for Effective Measurement in Surveys (Chapter 6) in Lyberg L, Biemer P, Collins M, De Leeuw E, Dippo C, Schwarz N and Trewin D (Eds.) *Survey Measurement and Process Quality* (1997) Wiley. New York: pp141-164.

Krosnick J A and Presser S (2010) Question and Questionnaire Design (chapter 9) in Marsden P V and Wrights J D (Eds.) (2010) *Handbook of Survey Research*. 2nd Edition. Emerald. pp.263-313.

[ONS \(2011a\) Measuring Subjective Well-being. Office for National Statistics.](#)

[ONS \(2011b\) Initial investigation into Subjective Well-being from the Opinions Survey. Office for National Statistics.](#)

[ONS \(2012\) Summary of results from testing of experimental subjective well-being questions.](#)

[ONS \(2013\) Personal well-being in the UK 2012/13.](#)

[ONS \(2014\) Personal well-being in the UK 2013/14.](#)

ONS (2015) *Opinions and Lifestyle Survey: Methodological Investigation into the Societal Module*.

[Opinions and Life Style Survey Technical Report. Office for National Statistics.](#)

Osgood, C. E., Suci, G. J., & Tannenbaum, P. H. (1957) *The measurement of meaning*. Urbana, IL: University of Illinois Press.

Preston, C.C. & Colman, A. (2000) Optimal number of response categories in rating scales: reliability, validity, discriminating power, and respondent preferences. *Acta Psychologica*, 104, 1-15.

Schuman, H. and Presser. (1981) Questions and Answers in Attitude Surveys . New York: Academic Press.

Thurstone, L. L. (1928) Attitudes can be measured. American Journal of Sociology, 33, 529–554.

Methods Notes

1. The data presented in this report are taken from the March, May, August and November 2014 OPN Survey and relate to Great Britain. The sample used for this analysis is an aggregation of these 4 months of data, giving an overall sample size of around 4,200. The 3 questions analysed in this report were asked in the same way for each of these months.
2. The OPN has been used as a testing vehicle for well-being analysis since April 2011 ([ONS, 2012](#)). Question testing using the OPN has continued since the development of the 4 headline personal well-being in order to explore and investigate additional personal/subjective well-being questions. The OPN is ONS' omnibus survey which covers Great Britain, running monthly to allow quick and reliable information on topics of immediate policy interest. It is for this reason it was chosen for testing questions on personal/subjective well-being. This forms part of the broader suite of Personal/Subjective Well-being question testing on the OPN ([ONS, 2011b](#); [ONS, 2012](#); ONS, 2015) .

The OPN is sampled from the Royal Mail's small user postcode address file. The survey is purely voluntary and asks questions to those over the age of 16 and selects an adult from a household on the basis of a Kish grid. Each month's achieved interviews are roughly 1,000 - 1,100 adults. The estimates in this release are weighted to take account of the uneven probability of selection from a household in the OPN and to calibrate responses so that they are representative of the whole population ([Opinions and Lifestyle Survey](#)).

3. Response rates

Table 3: Response rates for each of the 3 scale questions

| | Response rate (%) |
|----------------|-------------------|
| 11-point scale | 99.0 |
| 7-point scale | 99.8 |
| 5-point scale | 99.6 |
| Total | 99.5 |

Source: Opinions and Lifestyle Survey, Office for National Statistics

4. All estimates have been calculated with the weight (indwgt) applied. The weight was adjusted to take account of there being 4 datasets combined to run this analysis ([Opinions and Lifestyle Survey](#)). Standard Errors (used to calculate confidence intervals, CI) have been calculated taking into account the complex survey design and post-stratification weighting.

5. Significant differences when noted in the text have been calculated on the basis of F-tests. Note: F-tests are treating the well-being scores as continuous. Please see methods note 7.
6. Reverse scoring and Rescaling

For the 11-point scale and the 7-point scale, a higher response score indicated higher life satisfaction. However, due to the wording of the scale, this was not the case for the 5-point scale. For the 5-point scale a higher response score indicated lower life satisfaction. Therefore in places throughout this analysis the 5 point scale has been reverse scored for ease of analysis.

The 7-point scale and the 5-point scale were rescaled for part of the analysis in order to make them comparable with the 11-point scale. The 11-point scale was unaltered for this analysis. The rescaling was based on a formula by Preston and Coleman (2000) who used the formula $(\text{rating}-1)/(\text{number of response categories}-1) \times 100$ to rescale to a common score out of 100. For the purpose of this analysis, a similar formula was used which rescaled the original 7-point and 5-point scales to a scale from 0-10, in order to make them comparable with the 11-point scale.

Firstly, the 5-point scale was reverse scored. Each scale point on the 7-point scale and the 5-point scale was then inserted into the formula below, to create new scale points.

Formula: $(\text{rating} - 1)/(\text{number of response categories} - 1) \times 10$.

Table 5 displays the old values, and new values following the rescaling.

Table 5: Rescaling and Reverse Scoring Detail

| 11-point scale (original) | 11-point scale used in analysis (unchanged) | 7-point scale (original) | 7-point scale used in analysis (rescaled) | 5-point scale (original) | 5-point scale (reverse scored) | 5-point scale used in analysis (rescaled) |
|---------------------------|---|--------------------------|---|--------------------------|--------------------------------|---|
| 0 | 0 | 1 | 0 | 5 | 1 | 0 |
| 1 | 1 | 2 | 1.666667 | 4 | 2 | 2.5 |
| 2 | 2 | 3 | 3.333333 | 3 | 3 | 5 |
| 3 | 3 | 4 | 5.0 | 2 | 4 | 7.5 |
| 4 | 4 | 5 | 6.666667 | 1 | 5 | 10 |
| 5 | 5 | 6 | 8.333333 | | | |
| 6 | 6 | 7 | 10 | | | |
| 7 | 7 | | | | | |
| 8 | 8 | | | | | |
| 9 | 9 | | | | | |
| 10 | 10 | | | | | |

Source: Opinions and Lifestyle Survey, Office for National Statistics

7. The methods used in this paper assume that the scales are linear, and therefore treat the well-being data as continuous. The linearity assumption assumes that each scale point is

an equal distance away from the scale point preceding it. This means for example that we assume that the difference between a score of 1 and 2 is exactly equal to the difference between a score of 2 and 3, and so on. This in practice is unlikely to be the case but there is no way of adjusting the methodology to account for this.

8. For more information on Personal Well-being, please contact:
Personal Well-being Team, ONS
Telephone: 01633 455713
Email: personal.well-being@ons.gsi.gov.uk
9. Details of the policy governing the release of new data are available by visiting the [UK Statistics Authority](#) or from the [Media Relations Office](#)
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11. Details of the policy governing the release of new data are available by visiting www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html or from the Media Relations Office email: media.relations@ons.gsi.gov.uk
12. These statistics are experimental. Should users have comments on the ONS approach to the measurement of personal well-being and or the presentation of the personal well-being questions they can email ONS at national.well-being@ons.gov.uk.

Annex 1

Data for Figure 1: Histograms displaying the distribution of responses across the 11-point, 7-point and 5-point scale^{1,2}

| 11-point scale | | 7-point scale | | 5-point scale | |
|----------------|------|---------------|------|---------------|------|
| Scale point | % | Scale point | % | Scale point | % |
| 0 | 0.7 | 1 | 2.9 | 5 | 2.1 |
| 1 | 0.3 | 2 | 7.3 | 4 | 4.7 |
| 2 | 0.6 | 3 | 5.8 | 3 | 8.1 |
| 3 | 1.4 | 4 | 5.4 | 2 | 49.8 |
| 4 | 2.3 | 5 | 10.0 | 1 | 35.4 |
| 5 | 8.3 | 6 | 51.1 | | |
| 6 | 7.4 | 7 | 17.0 | | |
| 7 | 18.2 | | | | |
| 8 | 31.6 | | | | |
| 9 | 15.2 | | | | |
| 10 | 14.0 | | | | |

Source: Opinions and Lifestyle Survey, Office for National Statistics

Notes

1. The 5-point scale has been reversed to ease comparisons.
2. Estimates may not add up to 100 due to rounding.

Data for Figure 2: Cumulative frequency of responses across the 11-point, 7-point and 5-point scale¹

| 11-point scale | | 7-point scale | | 5-point scale | |
|----------------|-------|---------------|-------|---------------|-------|
| Scale point | % | Scale point | % | Scale point | % |
| 0 | 0.7 | 1 | 2.9 | 5 | 2.1 |
| 1 | 1.0 | 2 | 10.1 | 4 | 6.8 |
| 2 | 1.6 | 3 | 15.9 | 3 | 14.9 |
| 3 | 3.0 | 4 | 21.3 | 2 | 64.6 |
| 4 | 5.3 | 5 | 31.9 | 1 | 100.0 |
| 5 | 13.6 | 6 | 83.0 | | |
| 6 | 21.1 | 7 | 100.0 | | |
| 7 | 39.2 | | | | |
| 8 | 70.8 | | | | |
| 9 | 86.0 | | | | |
| 10 | 100.0 | | | | |

Source: Opinions and Lifestyle Survey, Office for National Statistics

Notes

1. The 5-point scale has been reversed to ease comparisons.

Data for Figure 3: Proportions of the population answering above, below and on the midpoint for each of the 3 scale questions

| | % below the midpoint | Midpoint | % above the midpoint |
|----------------|----------------------|----------|----------------------|
| 11 point scale | 5.3 | 8.3 | 86.4 |
| 7 point scale | 15.9 | 5.4 | 78.7 |
| 5 point scale | 6.8 | 8.1 | 85.1 |

Source: Opinions and Lifestyle Survey, Office for National Statistics

Data for Figure 4: Average¹ scores of rescaled variables on the 0-10 scale

| | Mean | 95% Confidence Interval |
|----------------|------|-------------------------|
| 11 Point scale | 7.6 | 0.1 |
| 7 Point scale | 7.3 | 0.2 |
| 5 Point scale | 7.8 | 0.1 |

Source: Opinions and Lifestyle Survey, Office for National Statistics

Notes:

1. Average score is based on the mean.